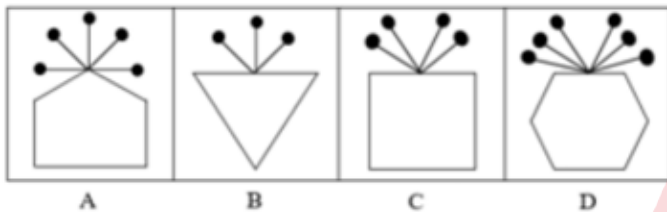Q1. A watch loses 5 minutes every hour and was set right at 6 a.m. on a Monday. When will it show the correct time again?
(a) 6 a.m. on next Sunday
(b) 6 a.m. on next Monday
(c) 3 a.m. on next Sunday
(d) 3 a.m. on next Monday

Q2. Select the picture which does NOT belong to the group.

(a) C
(b) B
(c) D
(d) A

Q3. Which of the following Venn diagrams correctly represents the following classes:
Karnataka, India, Asia

(a)

(b)

(c)

(d)

Q4. Consider the given statement to be true and decide which of the conclusions logically follow(s) from the statements.
Statement:
Public smoking has increased in the current year.
Conclusions:
1. Government should ban public smoking.
2. Government should create awareness about ill effects of public smoking.
(a) Only conclusion 1 follows.
(b) Neither 1 nor 2 follows.
(c) Only conclusion 2 follows.
(d) Both 1 and 2 follow.

Q5. What would be the smaller of the two angles formed by the hour hand and the minute hand at 4: 52 p.m.?
(a) 166°
(b) 162°
(c) 165°
(d) 164.5°

Q6. Consider the given statement as true and decide which of the given conclusions can definitely be drawn from the given statements.
Statements:
Some teachers are rich.
All diabetics are rich.
Conclusions:
1. Some diabetics are teachers.
2. Some rich people are diabetic.
(a) Neither 1 nor 2 can be drawn
(b) Only conclusion 1 can be drawn
(c) Both 1 and 2 can be drawn
(d) Only conclusion 2 can be drawn

Q7. How many triangles are there in the following figure?

(a) 30
(b) 28
(c) 26
(d) 24

Q8. 'Valuable' is related to 'Precious' in the same way as 'Dry' is related to '_____'.
(a) Farm
(b) Arid
(c) Rough
(d) Wet

Q9. Arrange the following words in a logical and meaningful order.
1. Hunger
2. Cry
3. Feeding
4. Child
5. Sleep
6. Mother
(a) 4,5,2,6,3,1
(b) 4,1,3,6,5,2
(c) 4,1,2,6,3,5
(d) 4,1,2,3,5,6

Q10. Choose the correct alternative that will continue the same pattern and replace the question mark (?)
2, 9, ?, 65, 126, 217
(a) 26
(b) 28
(c) 29
(d) 27

Q11. Three of the following four word-pairs are alike in a certain way and one is different. Pick the odd one out.
(a) Scalpel : Surgeon
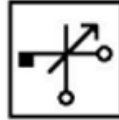(b) Chisel : Sculptor
(c) Anvil : Blacksmith
(d) Paper : Book

Q12. Three of the following four words are alike in a certain way and one is different. Pick the odd word out.
(a) Big
(b) Expensive
(c) Costly
(d) Valuable

Q13. If SUN is coded as NUS and Top is coded as POT, then which is the last letter in the code for the word FUR?
(a) F
(b) U
(c) R
(d) E

Q14. Select the correct mirror image of the given figure when the mirror is placed to the right of the figure.
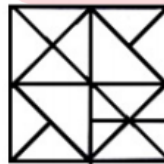

(a)

(b)

(c)

(d)

Q15. Find the missing number from the below options.

9   28   85
12   37   ?
16   49   148

(a) 134
(b) 112
(c) 96
(d) 140

Q16. How many triangles are there in the following figure?

(a) 34
(b) 32
(c) 36
(d) 24

Q17. Three of the following four words pairs are alike in a certain way and one is different. Pick the odd word out.
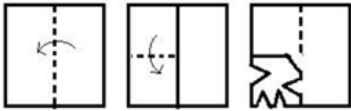(a) Dogri : Jammu and Kashmir
(b) Tamil : Kerala
(c) Bori : Arunachal Pradesh
(d) Konkani : Goa

Q18. Select the correct combination of mathematical signs to replace '*' signs and to balance the given equation.

24 * 34 * 2 * 5 * 12

(a) + ÷ × =

(b) × ÷ = +

(c) = ÷ - +

(d) + ÷ = ×

Q19. A square paper is folded and cut as shown below. How will it appear when unfolded?

(a)

(b)

(c)

(d)

Q20. Three of the following four number-pairs are alike in a certain way and one is different. Pick the odd one out.

(a) 8 : 69

(b) 13 : 179

(c) 12 : 149

(d) 14 : 201

Q21. Select the option that is related to the third term in the same way as the second term is related to the first term.

Sphygmomanometer: Blood Pressure: Barometer: ?

(a) Atmospheric Pressure

(b) Density

(c) Humidity

(d) Speed

Q22. Choose the correct alternative that will continue the same pattern and replace the question mark (?)

38 : 73 :: 65 : ?

(a) 78

(b) 69

(c) 72

(d) 61

Q23. Choose the correct alternative that will continue the same pattern and replace the question mark (?)

GJM : DBZ : : BEH : ?

(a) QNL

(b) QOM

(c) QON

(d) SQN

Q24. Choose the correct alternative that will continue the same pattern and fill the blank (?)

AB : AD :: CD : ?

(a) IP

(b) FP

(c) PY

(d) PQ

Q25. Choose the correct alternative that will continue the same pattern and fill the blank (?)

BY, CX, EV, GT, KP, _

(a) AZ

(b) MN

(c) RV

(d) PK

Q26. Choose the correct alternative that will continue the same pattern and replace the question mark (?)
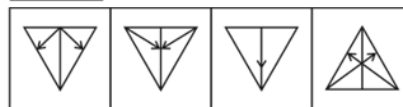
0, 4, 12, 16, 32, 60, 108 ?

(a) 198

(b) 199

(c) 200

(d) 201

Q27. Choose the correct alternative that will continue the same pattern and replace the question mark (?)

24, 60, 120, 210, ?

(a) 325

(b) 354

(c) 336

(d) 356

Q28. In each of the following figure there is a problem figure which is followed by four answer figures one of the answer figures is the water image of the problem figure, find the water image.

(a) B

(b) C

(c) A

(d) D

Q29. Four words have been given, out of which three are alike in some manner and one is different. Select the word that is different.
(a) Guide
(b) Mistress
(c) Instructor
(d) Mentor

Q30. Four number-pairs have been given, out of which three are alike in some manner and one is different.
(a) (16, 112)
(b) (15, 105)
(c) (18, 128)
(d) (17, 119)

Solutions

S1. Ans.(a)
Sol.
For the watch to show correct time again, it should lose 12 hours.
It loses 5 minutes in 1 hour.
It loses 1 minute in 12 minutes.
It will lose 12 hours or 720 minutes in = (720 × 12) = 144 hours = 6 days
So, it will show correct time again on 6 a.m. on Sunday.

S2. Ans.(d)

S3. Ans.(c)

S4. Ans.(b)
Sol.
Conclusion 2 is also a course of action and hence does not follow from the given information.
The statement gives no information about the suitable courses of action and therefore the two conclusions are invalid.
Hence, "Neither 1 nor 2 follows" is the correct answer.
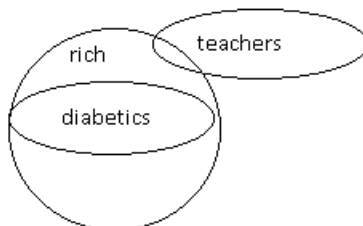
S5. Ans.(a)
Sol.
Angle = $|\frac{11}{2} M - 30H|$
Here, M = 52, H = 4
Therefore,
We get angle = $|\frac{11}{2} \times 52 - 30 \times 4|$
= 166^0

S6. Ans.(d)
Sol.

Some diabetics are teachers → It's possible but not definite, hence false.
Some rich people are diabetic → true
Thus, only statement 2 follows.

S7. Ans.(b)

S8. Ans.(b)
Sol.
Valuable is related to Precious. In the same way, Dry is related to Arid.

S9. Ans.(c)
Sol.
4,1,2,6,3,5 is the correct order.

S10. Ans.(b)
Sol.
$\Rightarrow 1^2 * 1 + 1 = 2$
$\Rightarrow 2^2 * 2 + 1 = 9$
$\Rightarrow 3^2 * 3 + 1 = 28$
$\Rightarrow 4^2 * 4 + 1 = 65$
$\Rightarrow 5^2 * 5 + 1 = 126$
$\Rightarrow 6^2 * 6 + 1 = 217$

S11. Ans.(d)
Sol.
Scalpel is the tool of Surgeon
Chisel is the tool of Sculptor
Anvil is the tool of Blacksmith
But,
Paper is not the tool of Book

S12. Ans.(a)
Sol.
Except Big, all others are the synonyms of each other.

S13. Ans.(a)
Sol.
SUN ⇒ NUS
TOP ⇒ POT
Similarly,
FUR ⇒ RUF
So, last letter is 'F'

S14. Ans.(a)
Sol.

S15. Ans.(b)
Sol.
$9 \Rightarrow (9 * 3) + 1 = 28$
$9 \Rightarrow (9 * 9) + 4 = 85$
$12 \Rightarrow (12 * 3) + 1 = 37$
$12 \Rightarrow (12 * 9) + 4 = 112$
and
$16 \Rightarrow (16 * 3) + 1 = 49$
$16 \Rightarrow (16 * 9) + 4 = 148$

S16. Ans.(a)
Sol.

S17. Ans.(b)
Sol.
Dogri is the tribe of Jammu and Kashmir
Bori is the tribe of Arunachal Pradesh
Konkani is the tribe of Goa
But
Tamil is not the tribe of Kerala

S18. Ans.(c)
Sol.
$24 = 34 \div 2 - 5 + 12$
$24 = 17 - 5 + 12$
$24 = 29 - 5$
$24 = 24$

S19. Ans.(b)
Sol.

S20. Ans.(b)
Sol.
$8^2 + 5 = 64 + 5 = 69$
$12^2 + 5 = 144 + 5 = 149$
$14^2 + 5 = 196 + 5 = 201$
Similarly,
$13^2 + 5 = 169 + 5 = 174$ not 179

S21. Ans.(a)
Sol.
Sphygmomanometer an instrument for measuring blood pressure.
Similarly,
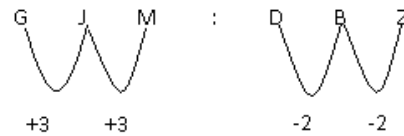Barometer an instrument for measuring Atmospheric pressure.
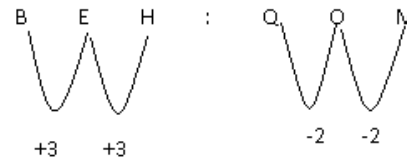
S22. Ans.(d)
Sol.
$38 = 3^2 + 8^2 = 73$
Similarly,
$65 = 6^2 + 5^2 = 61$

S23. Ans.(b)
Sol.

Similarly,

Hence, option B is correct answer.

S24. Ans.(a)
Sol.
$AB = 1, 2$
$AD = 1^2, 2^2$
Similarly,
$CD = 3, 4$
$IP = 3^2, 4^2$

S25. Ans.(b)
Sol.
The given series is a mixed series, The letters B, C, G and K are the letters in prime value positions. Hence, the next letter is M. The second in each group from a opposite pair of the first letter in that group. Hence, the next pair in the series is MN.

S26. Ans.(c)
Sol.
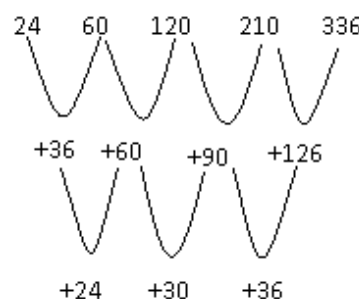$\Rightarrow 0 + 4 + 12 = 16$
$\Rightarrow 4 + 12 + 16 = 32$
$\Rightarrow 12 + 16 + 32 = 60$
$\Rightarrow 16 + 32 + 60 = 108$
$\Rightarrow 32 + 60 + 108 = 200$

S27. Ans.(c)
Sol.

S28. Ans.(c)
Sol.

S29. Ans.(b)
Sol.
A guide is a person who leads travellers, sportsmen, or tourists through unknown or unfamiliar locations.
A married man's mistress is a woman who is not his wife.
An Instructor is a teacher. One can be an instructor of just about anything.

The meaning of mentor is someone who teaches or gives help and advice to a less experienced and often younger person.

S30. Ans.(c)
Sol.
$(16, 112) \Rightarrow 112$ is divisible by 16.
$(15, 105) \Rightarrow 105$ is divisible by 15.
$(18, 128) \Rightarrow 128$ is not divisible by 18.
$(17, 119) \Rightarrow 119$ is divisible by 17.